

## **The Great Transition: Shifting from Fossil Fuels to Solar and Wind Energy Supporting Data - Energy Overview**

### [Share of Electricity Generation by Source in the United States, China, India, and the World, Latest Year](#)

GRAPH: Share of Electricity Generation by Source in the United States and China, latest year  
GRAPH: Share of Electricity Generation by Source in the United States, 2014  
GRAPH: Share of Electricity Generation by Source in China, 2012  
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### [Total Primary Energy Supply by Source in the United States, China, India, and the World, 2012](#)

GRAPH: Total Primary Energy Supply by Source in the United States and China, latest year  
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### [Annual Growth in Energy Use by Source in the United States, China, India, and the World, 2008-2013](#)

GRAPH: Annual Growth in Energy Use by Source in the United States, 2008-2013  
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### [U.S. Net Electricity Generation by Selected Sources, 1950-2014](#)

GRAPH: Annual Growth in U.S. Net Electricity Generation by Selected Sources, 2007-2014

A full listing of data for the entire book is on-line at:

[http://www.earth-policy.org/books/tgt/tgt\\_data](http://www.earth-policy.org/books/tgt/tgt_data)

This is part of a supporting dataset for **The Great Transition: Shifting from Fossil Fuels to Solar and Wind Energy**, by Lester R. Brown, with Janet Larsen, J. Matthew Roney, and Emily E. Adams (New York: W.W. Norton & Company, 2015).

For more information, see Earth Policy Institute on-line at [www.earth-policy.org](http://www.earth-policy.org)

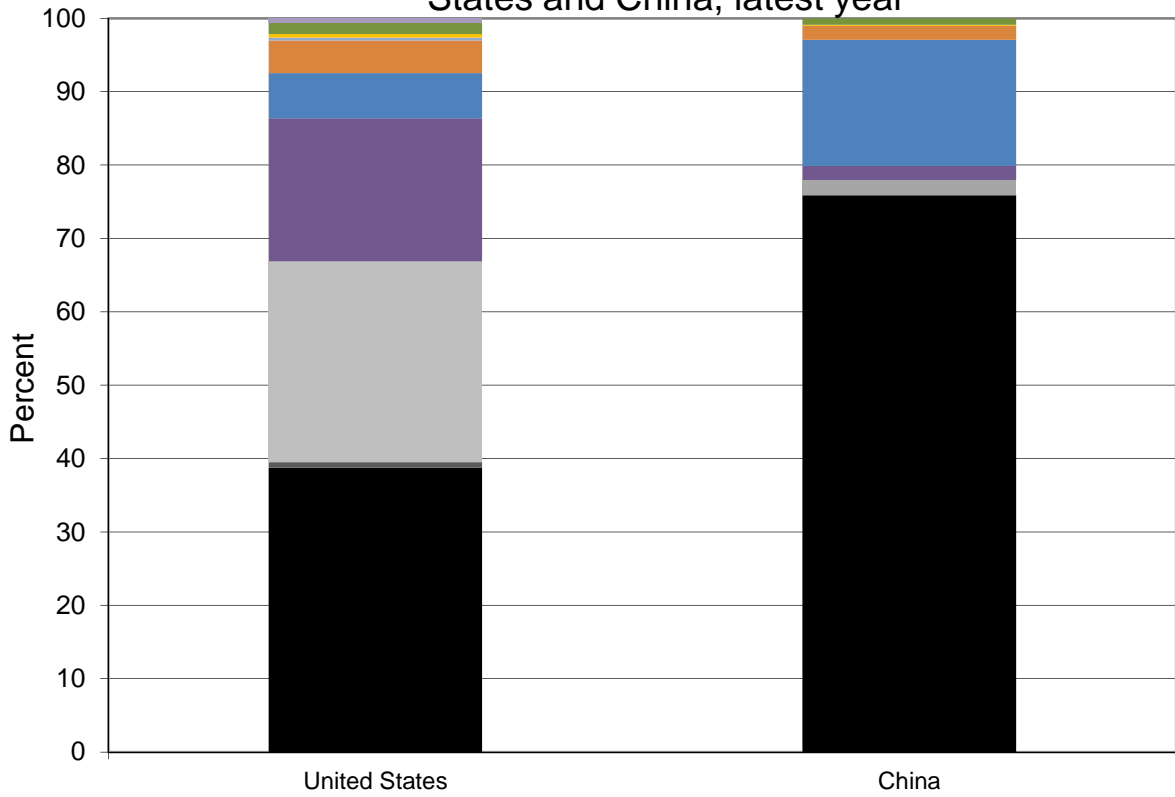
**Share of Electricity Generation by Source in the United States, China, India, and the World, Latest Year**

Fuel	United States	China	India	World
		Percent		
Coal	38.7	75.9	71.1	40.4
Oil	0.7	0.2	2.0	5.0
Natural Gas	27.4	1.9	8.3	22.5
Nuclear	19.5	1.9	2.9	10.9
Hydro	6.2	17.2	11.2	16.2
Wind	4.4	1.9	2.5	2.3
Geothermal	0.4	0.0	0.0	0.3
Solar	0.4	0.1	0.2	0.4
Biofuels and Waste	1.6	0.9	1.8	1.9
Other Sources	0.6	0.0	0.0	0.0

Note: United States figures use 2014 data; the rest are for 2012.

Source: Compiled by Earth Policy Institute from Organisation for Economic Co-operation and Development, *IEA Extended World Energy Balances*, electronic database, at [www.oecd-ilibrary.org/statistics](http://www.oecd-ilibrary.org/statistics), viewed 11 February 2015; United States data from "Energy Source: Total - All Sectors" and "Renewable Sources: Total - All Sectors," Tables 1.1 and 1.1.A in U.S. Department of Energy, Energy Information Administration, "Electric Power Monthly," at [www.eia.gov/electricity/monthly](http://www.eia.gov/electricity/monthly), updated 4 March 2014.

Share of Electricity Generation by Source in the United States and China, latest year

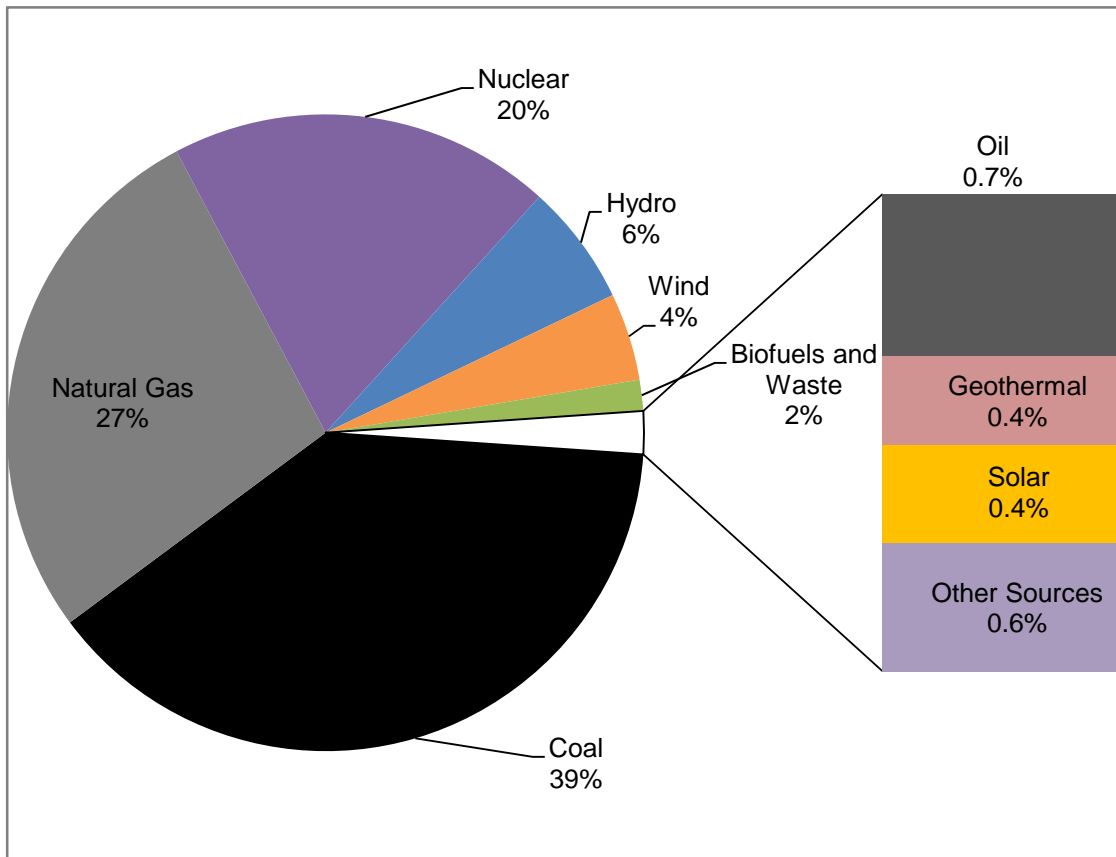


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- Coal
- Oil
- Natural Gas
- Nuclear
- Hydro
- Wind
- Geothermal
- Solar
- Biofuels and Waste
- Other Sources

Sources: OECD, EIA

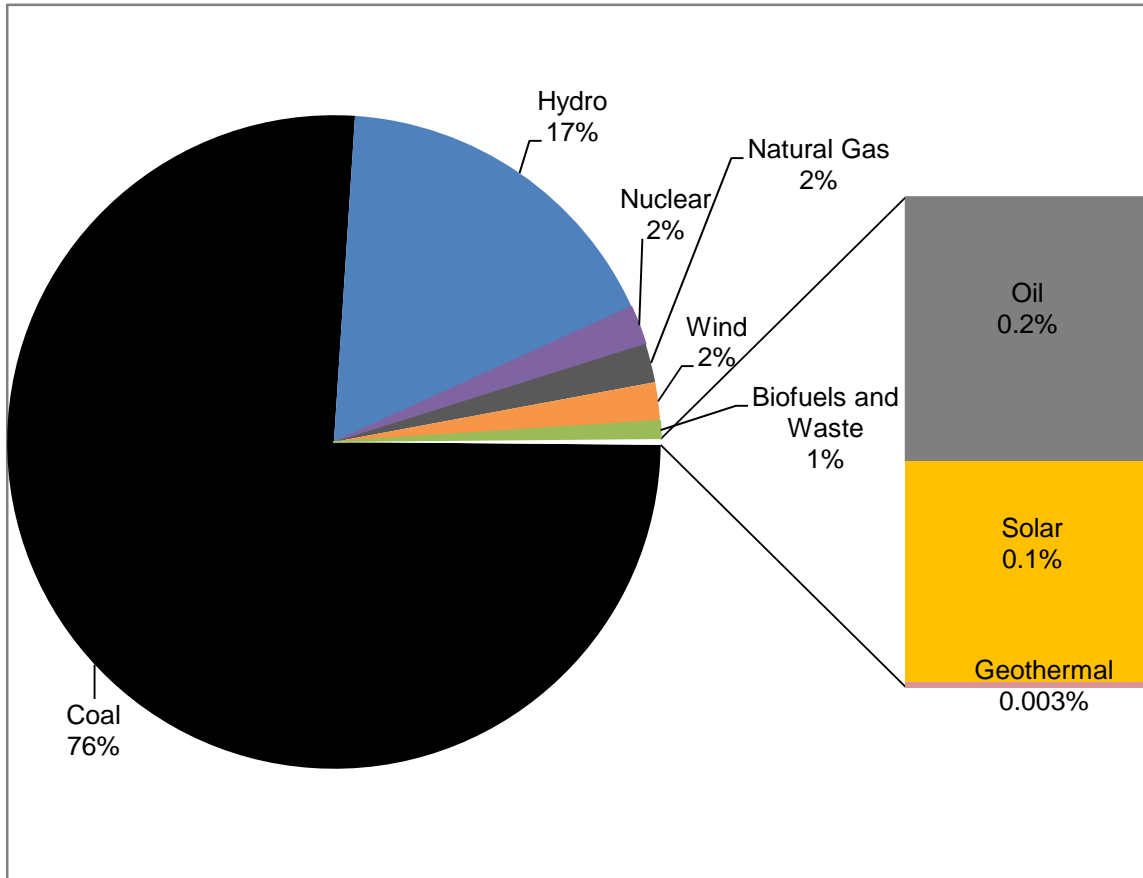
# Share of Electricity Generation by Source in the United States, 2014



Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

Source: EIA

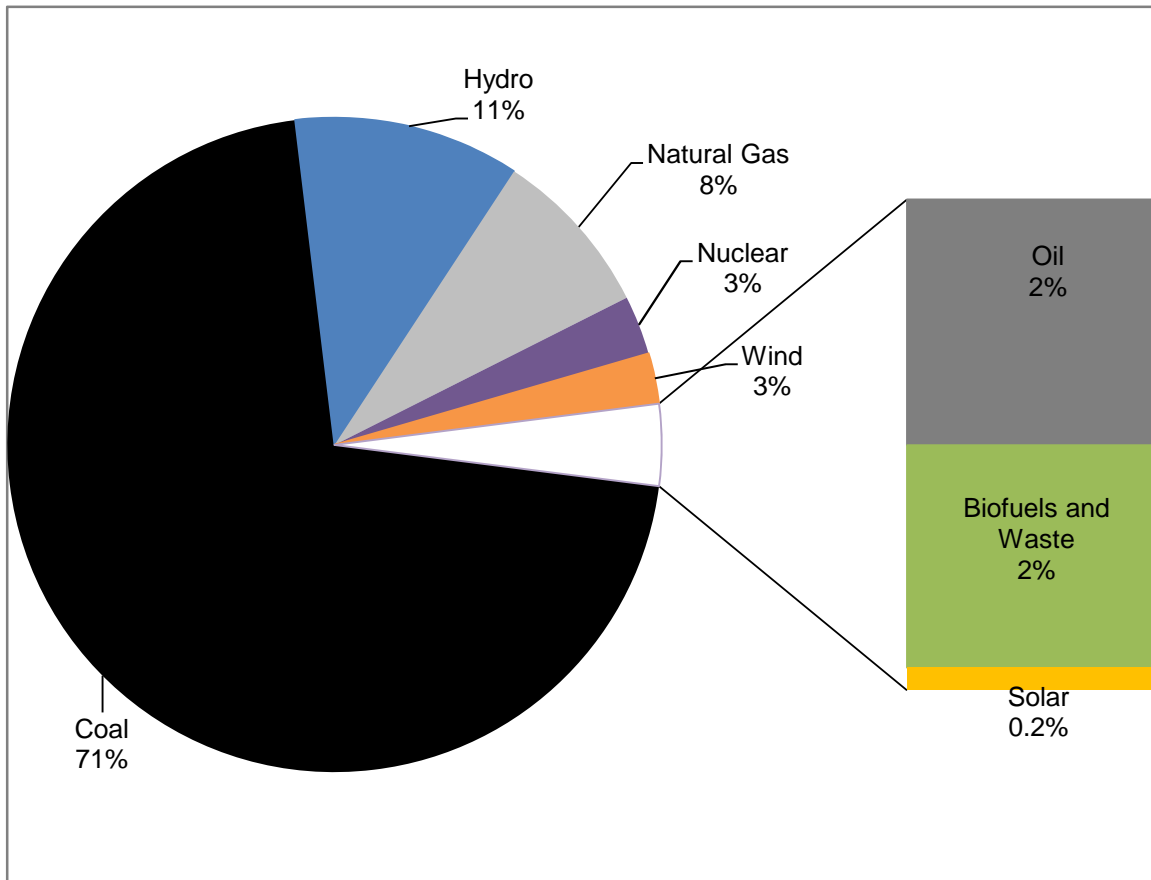
# Share of Electricity Generation by Source in China, 2012



Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

Source: OECD

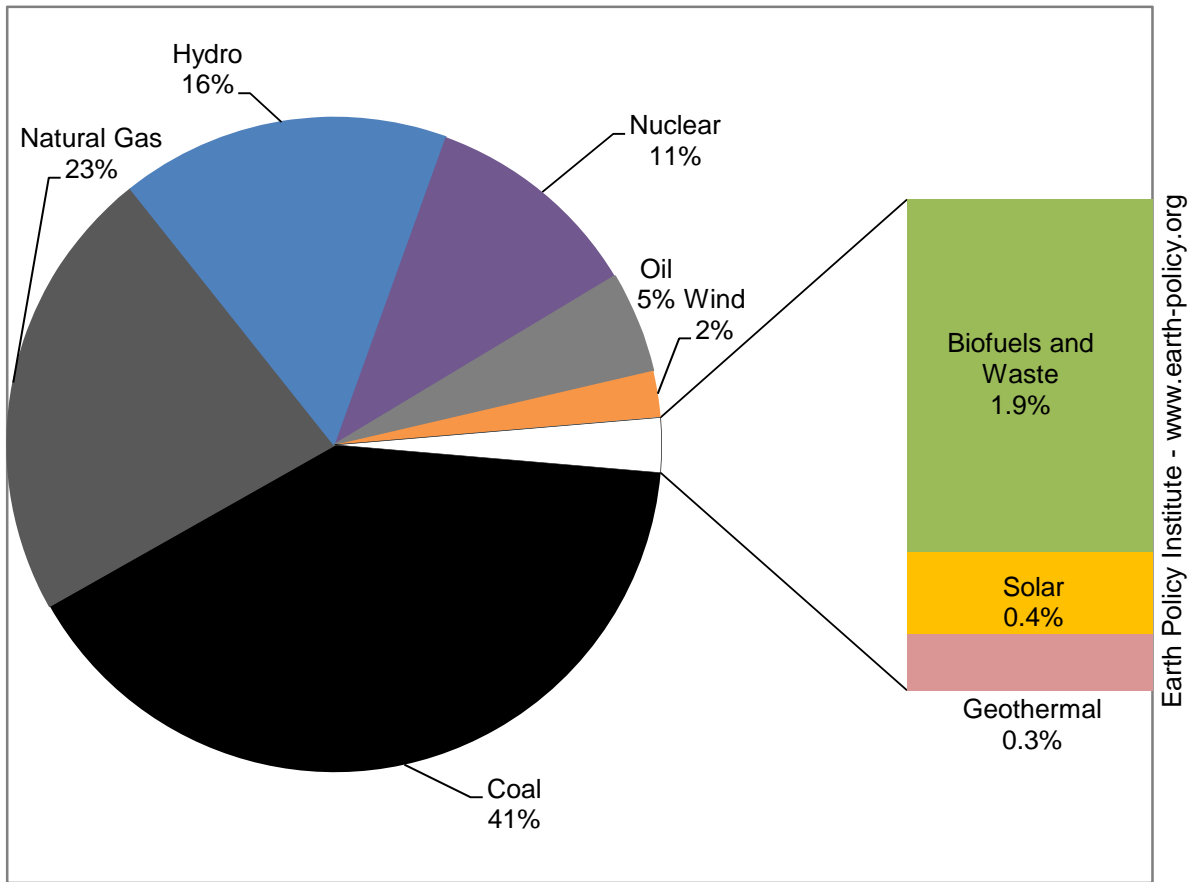
## Share of Electricity Generation by Source in India, 2012



Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

Source: OECD

# World Electricity Generation by Source, 2012



Source: OECD

Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

## Total Primary Energy Supply by Source in the United States, China, India, and the World, 2012

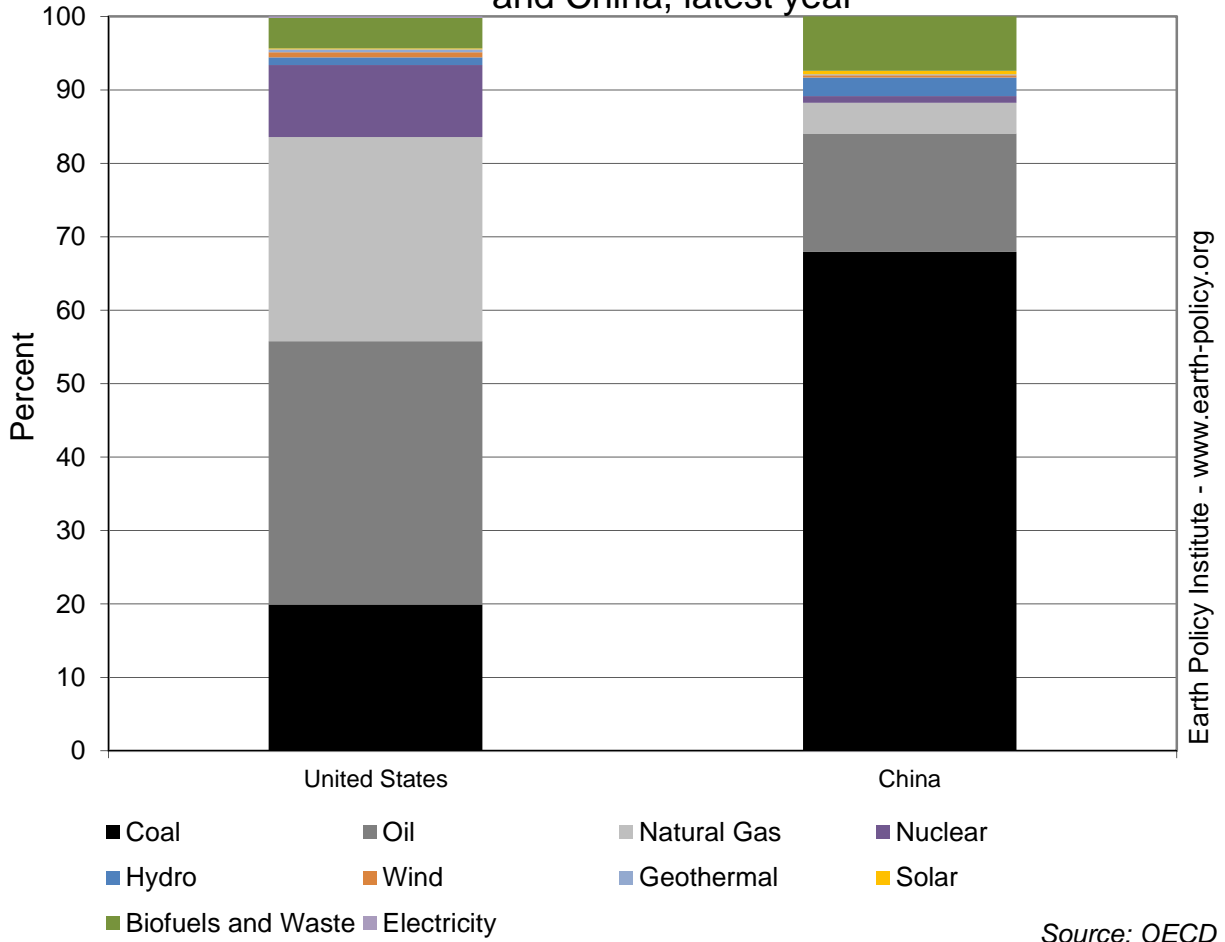
Fuel	United States*	China Percent	India	World
Coal	19.9	68.0	44.9	29.0
Oil	35.9	16.1	22.5	31.4
Natural Gas	27.8	4.2	6.2	21.3
Nuclear	9.8	0.9	1.1	4.8
Hydro	1.1	2.6	1.4	2.4
Wind	0.7	0.3	0.3	0.3
Geothermal	0.4	0.1	0	0.5
Solar	0.1	0.5	0.1	0.2
Biofuels and Waste	4.2	7.4	23.5	10.0
Electricity	0.2	0.0	0.1	0.0

\* Note: United States calculated using 2013 data.

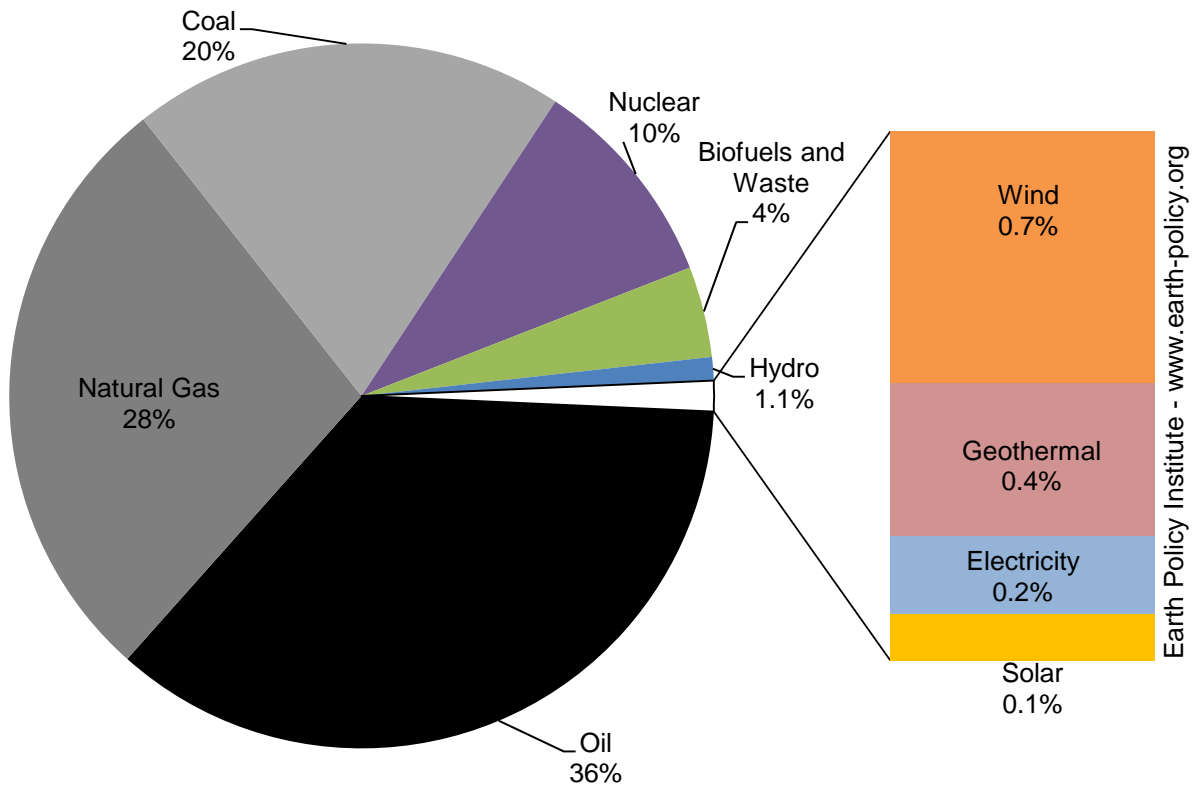
Source: Compiled by Earth Policy Institute from Organisation for Economic Co-operation and Development, *IEA Extended World Energy Balances*, electronic database, at [www.oecd-ilibrary.org/statistics](http://www.oecd-ilibrary.org/statistics), viewed 11 February 2015.



Total Primary Energy Supply by Fuel in the United States and China, latest year

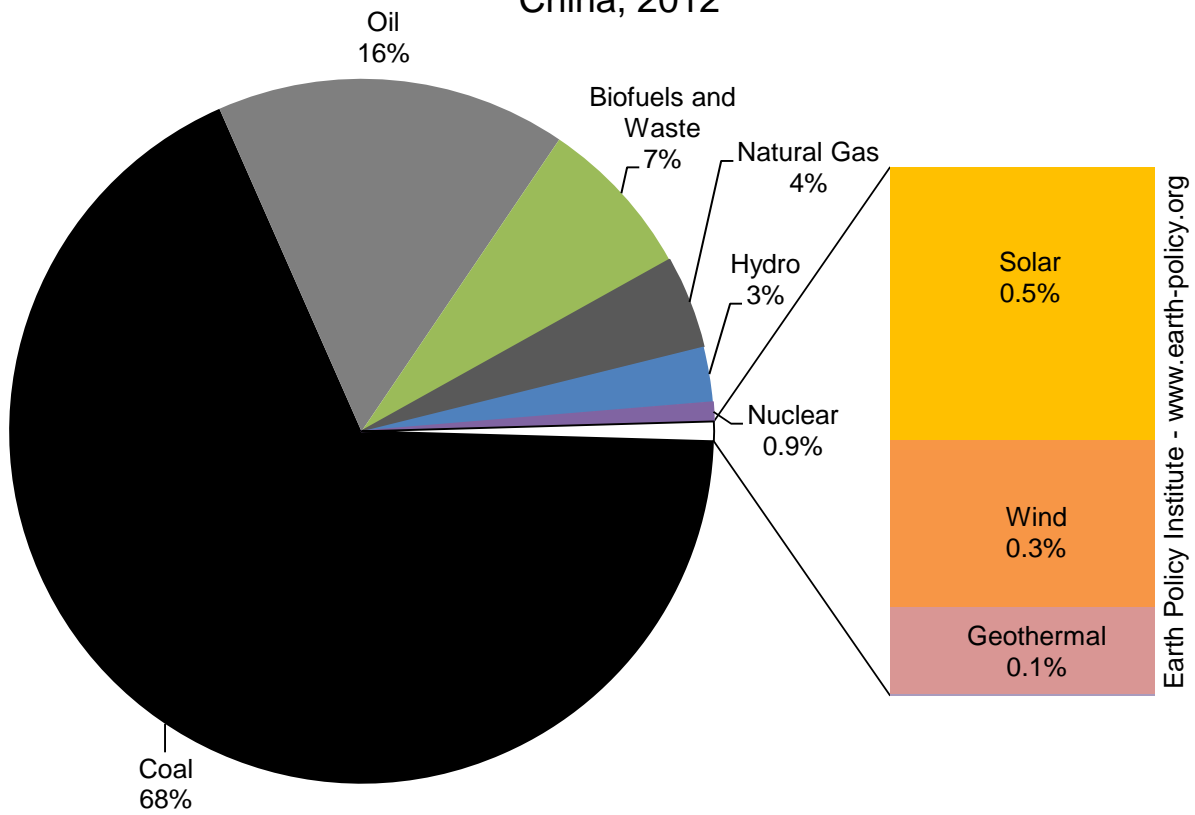


# Total Primary Energy Supply by Source in the United States, 2013



Source: OECD

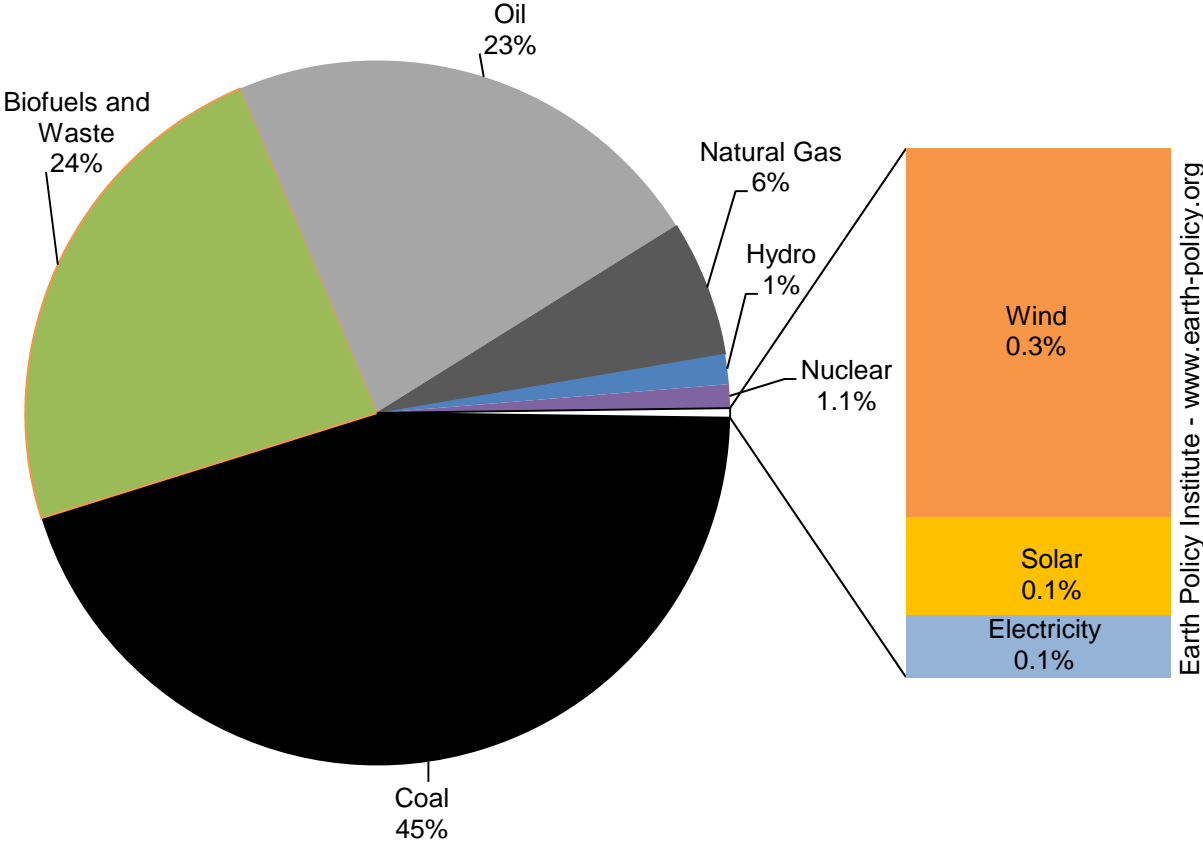
# Total Primary Energy Supply by Source in China, 2012



Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

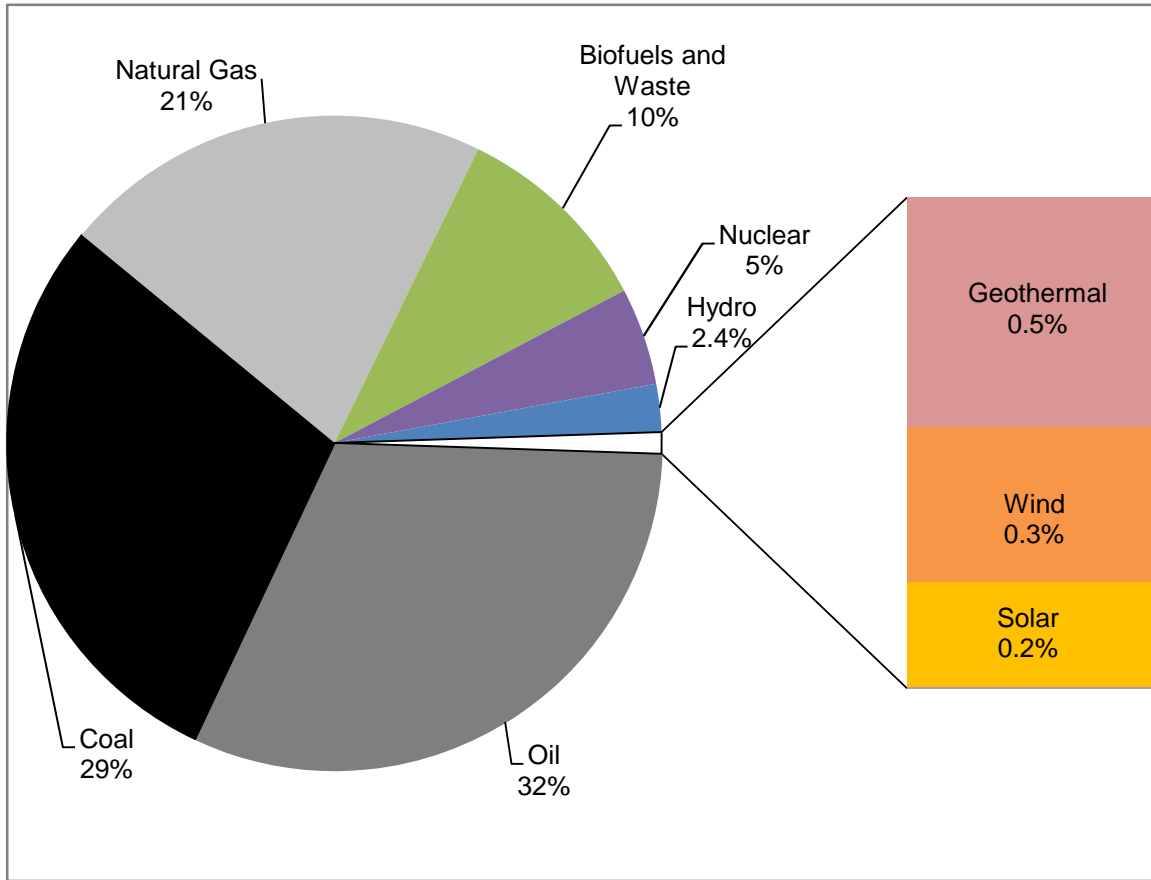
Source: OECD

# Total Primary Energy Supply by Source in India, 2012



Source: OECD

# World Total Primary Energy Supply by Source, 2012



Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

Source: OECD

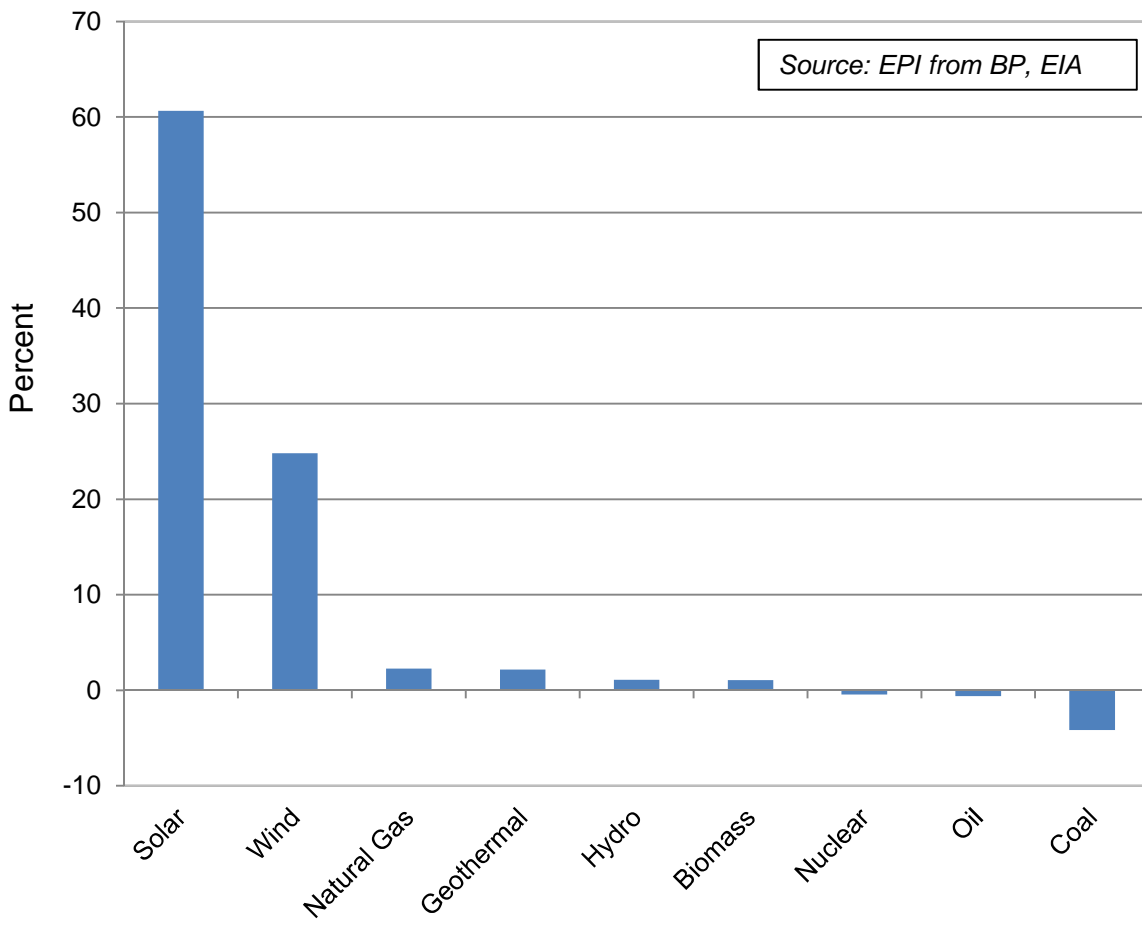
### Annual Growth in Energy Use by Source in the United States, China, India, and the World, 2008-2013

Fuel	United States	China	India	World
Compound Annual Growth Rate (Percent)				
Coal	-4.2	7.1	7.1	3.2
Oil	-0.6	6.1	3.9	1.2
Natural Gas	2.3	14.7	4.5	2.0
Nuclear	-0.4	10.1	16.9	1.9
Hydro	1.1	9.3	2.8	3.3
Wind	24.8	58.7	21.2	23.4
Geothermal	2.2	6.9	n.a.	3.7
Solar	60.7	138.8	93.8	62.0
Biomass	1.1	78.7	20.4	8.9

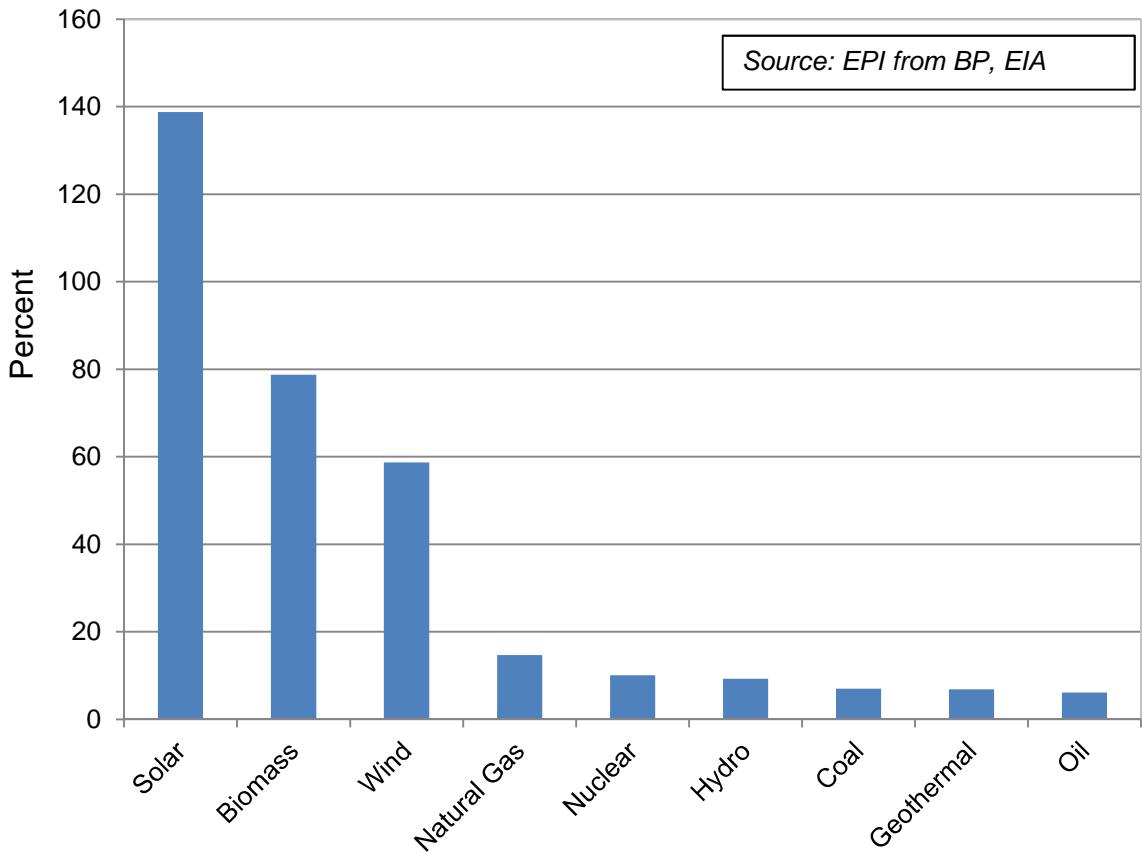
Note: Biomass and Geothermal figures for the United States, China, and India use data for 2007-2012. "n.a." means data is not available.

Source: Compiled by Earth Policy Institute with wind, solar, hydropower, coal, oil, nuclear, and natural gas from BP, *Statistical Review of World Energy June 2014* (London: 2014); biomass and geothermal in United States, China, and India for 2007-2012 from U.S. Department of Energy, Energy Information Administration, *International Energy Statistics*, electronic database, at [www.eia.gov/countries/data.cfm](http://www.eia.gov/countries/data.cfm), viewed 12 August 2014; world 2013 biomass and geothermal generation from REN21, *Renewables 2014 Global Status Report* (Paris: REN21 Secretariat, 2014), pp. 32, 38.

### Annual Growth in Energy Use by Source in the United States, 2008-2013

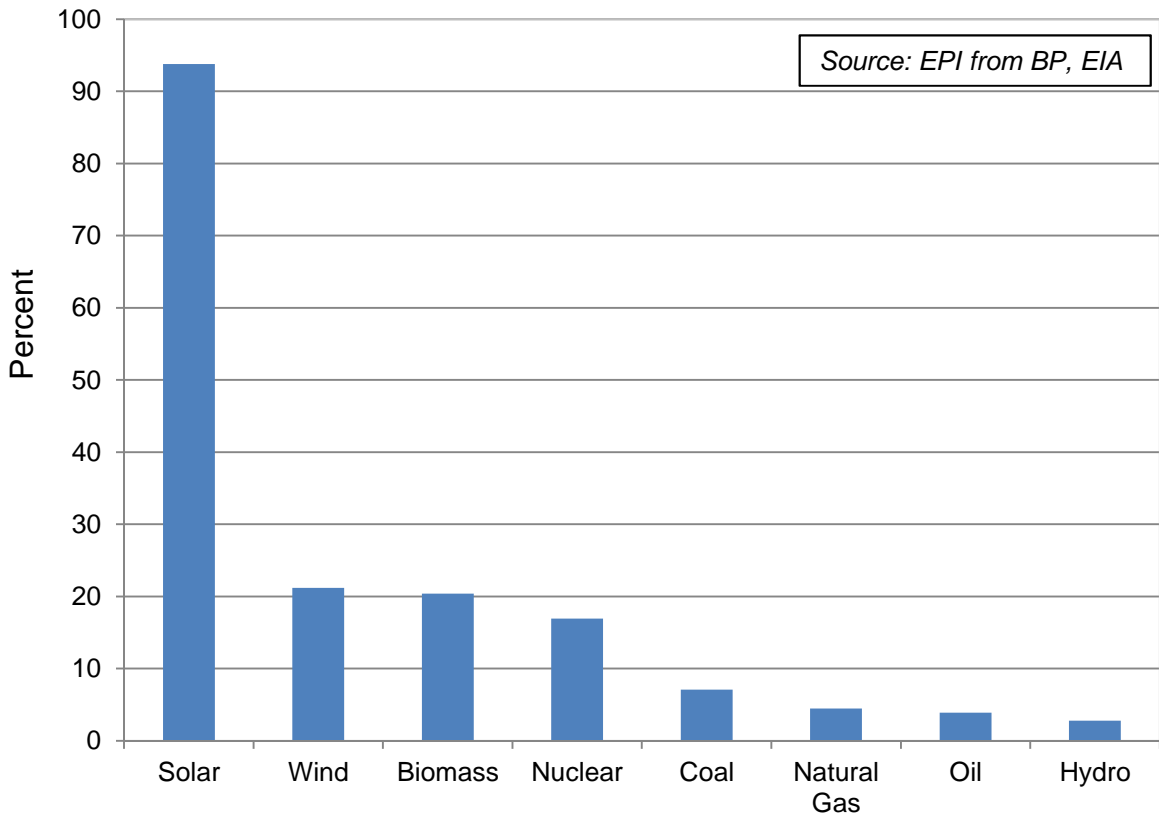


# Annual Growth in Energy Use by Source in China, 2008-2013

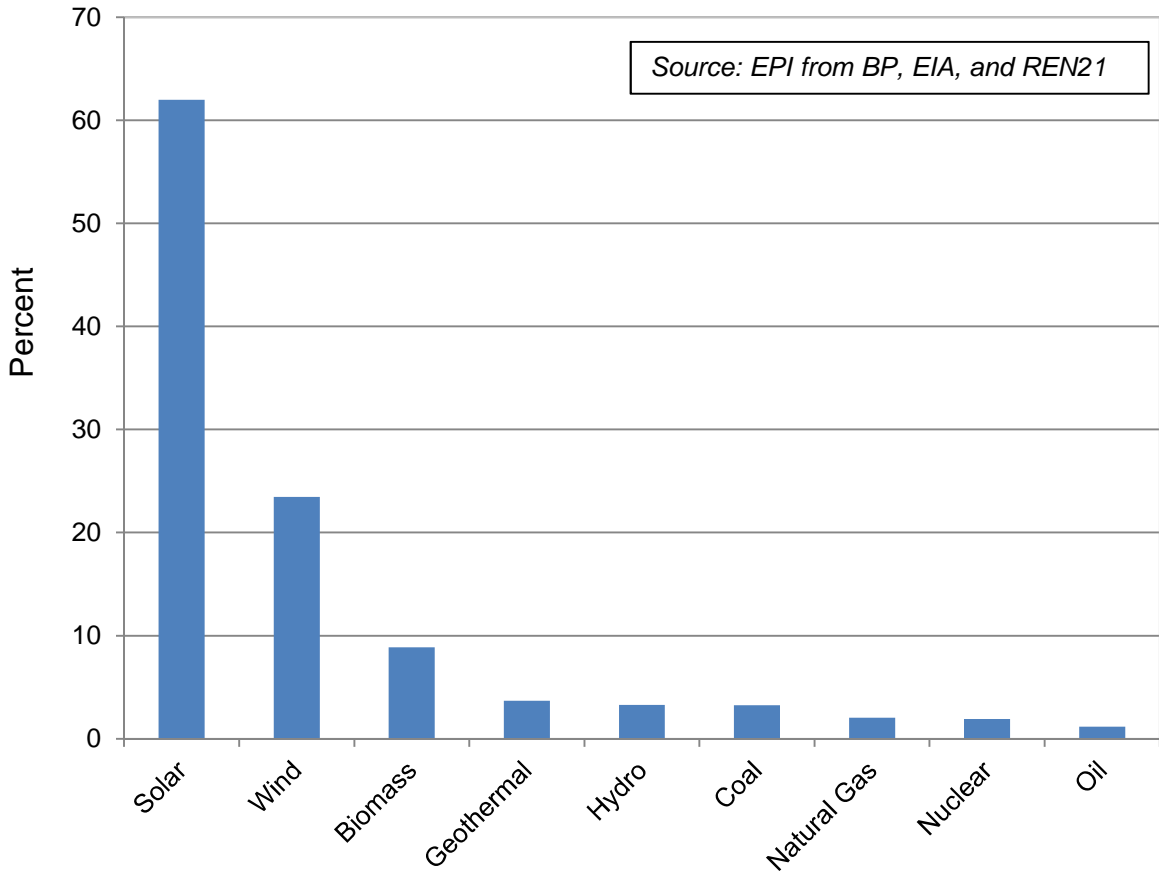




## Annual Growth in Energy Use by Source in India, 2008-2013



# World Annual Growth of Energy Use by Source, 2008-2013



**U.S. Net Electricity Generation by Selected Sources, 1950-2014**

Year	Coal	Natural Gas	Nuclear	Hydro	Wind	Solar PV	Total from All
							Sources
Terawatt-hours							
1950	155	45	0	101	n.a.	n.a.	334
1951	185	57	0	104	n.a.	n.a.	375
1952	195	68	0	110	n.a.	n.a.	404
1953	219	80	0	110	n.a.	n.a.	447
1954	239	94	0	112	n.a.	n.a.	476
1955	301	95	0	116	n.a.	n.a.	550
1956	339	104	0	125	n.a.	n.a.	604
1957	346	114	0	133	n.a.	n.a.	635
1958	344	120	0	144	n.a.	n.a.	648
1959	378	147	0	141	n.a.	n.a.	713
1960	403	158	1	149	n.a.	n.a.	759
1961	422	169	2	156	n.a.	n.a.	797
1962	450	184	2	172	n.a.	n.a.	858
1963	494	202	3	169	n.a.	n.a.	920
1964	526	220	3	180	n.a.	n.a.	987
1965	571	222	4	197	n.a.	n.a.	1,058
1966	613	251	6	198	n.a.	n.a.	1,148
1967	630	265	8	225	n.a.	n.a.	1,218
1968	685	304	13	226	n.a.	n.a.	1,333
1969	706	333	14	253	n.a.	n.a.	1,445
1970	704	373	22	251	n.a.	n.a.	1,535
1971	713	374	38	270	n.a.	n.a.	1,616
1972	771	376	54	276	n.a.	n.a.	1,753
1973	848	341	83	275	n.a.	n.a.	1,864
1974	828	320	114	304	n.a.	n.a.	1,870
1975	853	300	173	303	n.a.	n.a.	1,921
1976	944	295	191	287	n.a.	n.a.	2,041
1977	985	306	251	224	n.a.	n.a.	2,127
1978	976	305	276	283	n.a.	n.a.	2,209
1979	1,075	329	255	283	n.a.	n.a.	2,251
1980	1,162	346	251	279	n.a.	n.a.	2,290
1981	1,203	346	273	264	n.a.	n.a.	2,298
1982	1,192	305	283	312	n.a.	n.a.	2,244
1983	1,259	274	294	335	0	n.a.	2,313
1984	1,342	297	328	324	0	0	2,419
1985	1,402	292	384	284	0	0	2,473
1986	1,386	249	414	294	0	0	2,490
1987	1,464	273	455	253	0	0	2,575
1988	1,541	253	527	226	0	0	2,707
1989	1,584	353	529	272	2	0	2,967
1990	1,594	373	577	293	3	0	3,038
1991	1,591	382	613	289	3	0	3,074
1992	1,621	404	619	253	3	0	3,084
1993	1,690	415	610	280	3	0	3,197
1994	1,691	460	640	260	3	0	3,248
1995	1,709	496	673	311	3	0	3,353
1996	1,795	455	675	347	3	1	3,444
1997	1,845	479	629	356	3	1	3,492
1998	1,874	531	674	323	3	1	3,620
1999	1,881	556	728	320	4	0	3,695
2000	1,966	601	754	276	6	0	3,802
2001	1,904	639	769	217	7	1	3,737
2002	1,933	691	780	264	10	1	3,858
2003	1,974	650	764	276	11	1	3,883
2004	1,978	710	789	268	14	1	3,971
2005	2,013	761	782	270	18	1	4,055
2006	1,991	816	787	289	27	1	4,065
2007	2,016	897	806	248	34	1	4,157
2008	1,986	883	806	255	55	1	4,119
2009	1,756	921	799	273	74	1	3,950
2010	1,847	988	807	260	95	1	4,125
2011	1,733	1,014	790	319	120	2	4,100
2012	1,514	1,226	769	276	141	4	4,048
2013	1,581	1,125	789	269	168	9	4,066
2014	1,586	1,122	797	259	182	18	4,093
Percent Annual							
Growth 2007-2014	-3.4	3.3	-0.2	0.6	26.8	62.5	-0.2

Note: "n.a." indicates data not available.

Source: Compiled by Earth Policy Institute with data for 1950-2012 from "Electricity Net Generation: Total (All Sectors)," Table 7.2a in U.S. Department of Energy (DOE), Energy Information Administration (EIA), "Monthly Energy Review," at [www.eia.gov/totalenergy/data/monthly](http://www.eia.gov/totalenergy/data/monthly), updated 24 February 2015; and with data for 2013-14 from various tables in "Net Generation," Chapter 1 in DOE, EIA, "Electric Power Monthly", at [www.eia.gov/electricity/monthly](http://www.eia.gov/electricity/monthly), updated 4 March 2015.

### Annual Growth in U.S. Net Electricity Generation by Selected Sources, 2007-2014

